



EITK1000

Configuration, maintenance and diagnostics kit
for IRIS and ENEA series devices

Before using the EITK1000, please read carefully through this instructions guide. Improper use, that is, use in ways other than those mentioned herein will automatically void the warranty. Moreover, the manufacturer shall not assume responsibility for any damage arising from improper application or use.

ATTENTION!

General description

The EITK1000 kit was designed to configure, service and carry out diagnostics on systems using IRIS and ENEA series devices. The device comes in a handy pouch containing:

- **EITK-DRV**, zone driver
- **EITK-BASE**, detector to reader connection base
- **EITK-PWSP**, 24Vdc power supply for the EITK-DRV driver
- CD containing **FireGenius**, configuration and management software application
- USB cable; driver to PC
- Instructions manual (this document)

The EITK1000 allows you to configure each detector to suit its specific environment. It also allows you to connect directly to the detector line for a complete diagnosis of each device and, as a result, test the device's operating capacity, verify its real-time values, read the contamination level in the optical smoke chamber and change its sensitivity and operating mode.

Each detector has a non-volatile memory which allows you to read the smoke and temperature levels measured in the 5-minute period prior to the last alarm event and thus discern the rate of intensification of smoke and temperature levels.

The EITK1000 takes full advantage of the Versa++ technology integrated into IRIS and ENEA conventional detectors. This innovative technology allows you to configure each detector to suit its specific environment and thus allows you to:

- Identify each conventional detector on the line
- Select the operating mode of each detector (flashing on LED, flashing on remote indicator, etc.)
- Adjust the sensitivity of the smoke sensor
- Adjust the sensitivity of the temperature sensor
- Select the smoke and temperature combination -
 - OR Mode
 - AND Mode
 - Temperature only
 - Smoke only
 - PLUS Mode
- Activate the detector LED manually (red or green)
- View fault details (chamber contamination, chamber fault, thermal probe fault, etc.)
- Have access to complete detector diagnostics -
 - Level of contamination in the chamber
 - Real-time smoke level
 - Real-time temperature value

The EITK1000 also utilizes **LOOPMAP** technology for analogue-addressable detectors from the ENEA series and thus allows you to address loop devices and carry out fault detection on the wiring. LOOPMAP allows you to:

- Recognize the detectors automatically
- Reconstruct a map of the loop wiring, discern the device-connection order, trace eventual "T" junctions and identify the physical characteristics of the loop
- Detect short-circuits on the loop (each device is equipped with a short-circuit isolator)
- Activate the tricolour LED of each device manually

The EITK-DRV driver (included in the EITK1000 kit) is capable of operating autonomously by way of its internal battery, keypad and display. However, when connected to a PC, it is powered through the USB port.

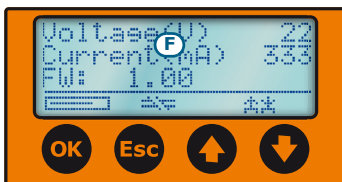
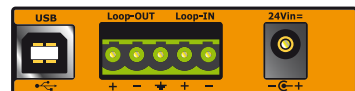
If the latter method is used, the PC must be equipped with the **FireGenius** software application which, by means of a graphic interface, allows you to interact with the detectors.

EITK100-DRV technical specifications

Voltage	22-30 Vdc
Operating temperature	-5°C / +40°C
Humidity (without condensation)	95% RH
Internal batteries	1800 mAh, 3.70Volt rechargeable lithium polimer batteries
Display	Graphic display – 96 x 32
Loop current limitation	250 mA resettable heat fuse
Housing	Polystyrene casing
Maximum loop load	200 mA (without line resistance)
Maximum line resistance	40 Ohm
Maximum loop capacity	4 µF
Dimensions	125 x 100 x 34 mm
Weight	180 gr

EITK100-DRV description of parts

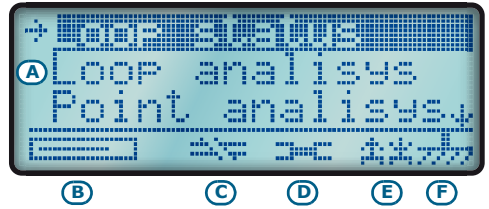
A	Casing, top view
B	LED RX
C	LED TX
D	Battery level LED
E	Label - display side
F	Display
G	OK button
H	Esc button
I	Up button
J	Down button
K	Label - terminal board side
L	USB Port
M	Connection terminals
N	24Vdc socket


E

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EITK100-DRV description of LEDs

RX	Green	Current signal reception	
TX	Red	Current signal transmission	
Battery	Yellow	Reader connected via USB	Internal battery recharging
	Green		Internal battery charged

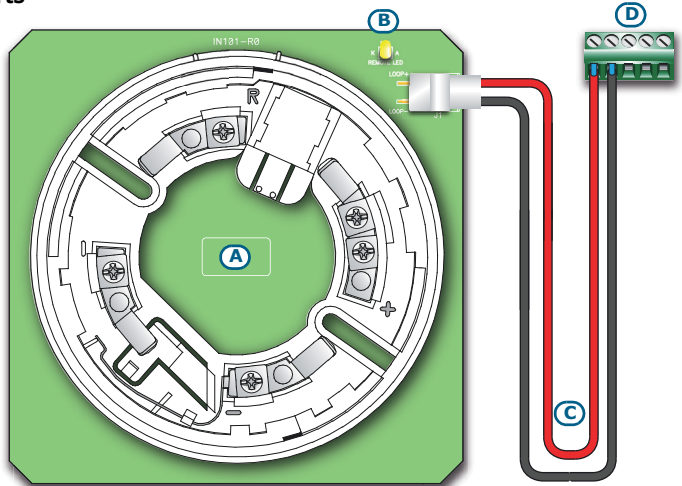
EITK100-DRV display

A	The menu section in use
B	Internal battery level
C	If present, the loop is open
D	If present, the reader output channel is shorted
E	Driver status: the Up arrow indicates the driving mode for the Loop-OUT channel (on the left) and Loop-IN channel (on the right); the Down arrow indicates that the channel is either in input status or disconnected.
F	If present, this indicates an earth fault




EITK100-BASE description of parts

A	Base
B	Remote LED
C	Connection cable (supplied)
D	Terminals



EITK100-PWSP technical specifications

Input voltage	100-240V ac $\pm 10\%$ 50/60Hz
Current draw	0.28 A (max)
Output voltage	14V $\pm 1\%$
Maximum current output	1.05 A
Operating temperature	-5 to +40 °C
Isolation class	II 
Dimensions (L x H x D)	95 x 28 x 42 mm
Weight (with wires)	250 gr
Output ripple	< 1%

Wiring

You can connect the EITK-DRV by means of the sockets on the back of the device unit (*table EITK100-DRV description of parts, [K]*):

- The **USB port** socket allows you to connect the reader to a computer USB port via the USB cable (supplied). Once connected, the reader will recharge its internal battery and, when connected to a detection loop or line, will operate as the interface between the system and the FireGenius software application installed on the PC.
- The **connection terminals** are for the connection with the detection loop or line and are defined as follows:
 - **Loop-OUT +** and **-**, positive and negative of the output line driver.
 - **Loop-IN +** e **-**, positive and negative of the output line driver). During the programming process, the output line driver can be configured as LOOP-IN.
 - If the **Earth** terminal is connected to earth line it will allow you to test for sneak currents (leakage to Earth).

The EITK1000 can be used only to connect to a single conventional line or a single analogue loop.

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- **24Vin= socket.** This socket is for an EITL-PWSP power supply which provide powers when the battery power is insufficient.

To assure proper functioning of the device, use only the custom wire and power supply (included).

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Programming devices via the driver unit

Switch On

Press and hold the **OK** button for 3 seconds to switch the device on. The display will show the loop status. Press the **Esc** button to access the menu.

Switch Off

The driver will switch Off automatically if no operations are carried out for 4 minutes.

Main menu

The Main menu provides access to the driver options.

Use the **Up** and **Down** keys and the **OK** button to select the desired option. The selected option will be indicated by the arrow (to the left) and, if it can be changed by the user, it will also be highlighted. The status of an option which can be enabled and disabled is indicated by an **"X"** sign (to the right of the option) if it is already enabled or by a **"-"** sign if it is disabled. To change the current status, simply press the **OK** button.

Press **Esc** to step back.

- **Loop status**, provides the following data:
 - **Voltage**, value in Volts
 - Distributed **Current** in mA
 - **Firmware** version of the driver
- **Loop analysis**, allows the device to acquire the data of the system it is connected to
 - **Acquire**, use this option to enrol already addressed peripherals in the configuration
 - **Re-address**, use this option to address new devices or re-address previously enrolled peripherals and enrol them in the configuration
 - **Verify**, remaps the connected peripherals in the correct order
- **Point analysis**, shows a list of the peripherals in the configuration. By selecting a device from the list, you will be able to view the device details (series number, device type, etc.), modify its sensitivity, activate the LEDs or access the programming phase.

If there are no devices in the configuration the display will show "??".

If only one device is directly connected to the driver, press **OK** on the "??" line to view its details.

- **Loop driving**, press **OK** on this option to select the driving mode, that is, the output channel, as follows:
 - Loop IN
 - Loop OUT
 - Both
 - Disconnected

- **Manual address**, this option allows you to assign a logic address to the device which is directly connected to the driver.
- **Load config.**, this section allows you to retrieve previously saved configurations.
- **Save config.**, this section allows you to save up to 100 configurations to the driver memory.
- **Factory settings**, this option allows you to reset the device. Once reset is confirmed, by pressing **OK** the device will reset to the factory default settings. The next time driver switches On, you will be asked to select the language on the display.

Reset operations will delete all the configurations previously saved to the driver memory.

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FireGenius

Installation

Before installing the FireGenius software application, ensure that the PC has a USB port (for the EITK1000-DRV connection) and that .NET Framework 2.0 platform or higher is installed (refer to the Microsoft Site for details).

The supported operative systems are:

- Microsoft® Win98 Seconda Edizione (SE)
- Microsoft® Windows 2000
- Microsoft® Windows ME
- Microsoft® Windows XP
- Microsoft® Windows Vista
- Microsoft® Windows Seven

To install Firegenius: insert the CD (supplied with the EITK1000), launch the SetupFireGenius.exe file (contained on the CD) and follow the installation guide.

Access to the application

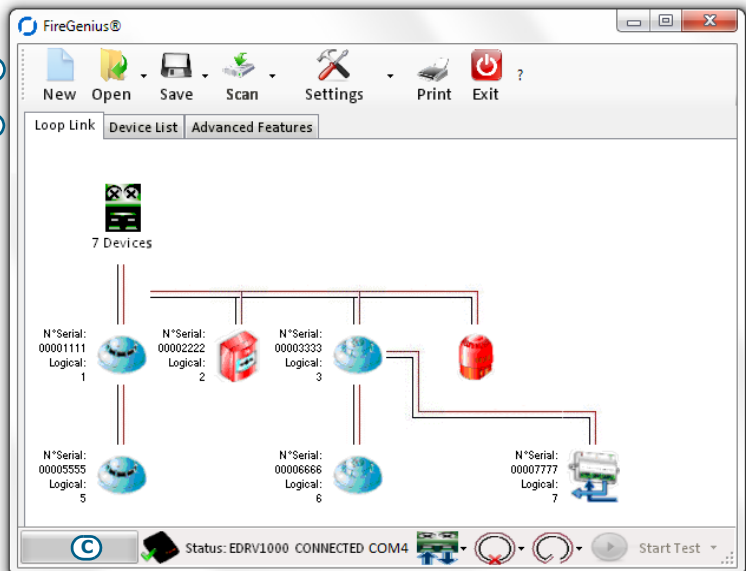
Once installation is complete, the FireGenius icon will appear on the desktop of your PC. Click-on the icon to start the application and login.

The default login data is as follows:

- username = "user"
- password = "password"

FireGenius interface

A	Menu bar
B	Configurations tabs
C	Information bar



- **Menu bar**, provides the icons which allow you to access the various functions and settings of the FireGenius software application, as follows:
 - **New**, allows you to start a new loop or line configuration.
 - **Open**, allows you to load the configurations previously saved to a database on the PC or driver.
 - **Save**, allows you to save modified configurations to a database on the PC or driver, if connected.
 - **Scan**, allows you to acquire or re-address the peripherals connected to the driver.
 - **Settings**, provides the various options for the configuration of the software application and the connected driver.
 - **Print**, provides a preview of the printout of the "Device list".
 - **Exit**, closes Firegenius
- **Configurations tabs**, these tabs allow you to view and access the configurations:
 - **Loop link**, provides a tree structure of the loop or line concerned. Click-on the respective icon to view or change the device settings.
 - **Device list**, shows all the devices in the configuration in order you prefer (serial n°, logical, etc.)
- **Information bar** (bottom of window), provides users with important information regarding the driver:
 - **Status**, provides information regarding the status of the EITK1000-DRV driver
 - **Driver icon**, shows the loop driving status; also functions as a button which allows you to change the status of the driver
 - **Loop icon**, shows the operating status of the loop currently connected to the driver
 - If the "Device list" window is open, the **Start Test** button will also be active. This button will allow you to carry out a functionality test on the connected devices, the results of which can be saved to the database.

Any errors or notifications will be shown on the Windows toolbar.

Configuration

You can create a new configuration or make changes to a previously saved configuration via the "Loop link" window. The system is represented by a tree structure, whose nodes are represented by the system device icons.

The construction of a system can be obtained by right-clicking on the respective node icons. This operation allows you to add a new device to the line of the selected node or any "T" junction, or delete the node completely. This construction mode is for demonstration purposes only.

Device settings

It is possible to access each individual device on the system in question via all three windows of the software application.

Via the "Loop link" window: mouseover the icon of the device to open a tooltip showing the basic information regarding the device in question. Click-on the device to view its settings and parameters.

Via the "Device list" window: double click-on the serial number line of the device you wish to programme or double click on any programming field to view its settings and parameters.

To programme the settings and parameters of several devices in the same way, select the respective devices then right-click (anywhere) to open a window which will allow you to set the parameters of all the selected devices.

INIM Electronics reserves the right to change the technical specifications of this product without prior notice.

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